

Remarks/Arguments

Upon entry of the foregoing amendments, claims 30 and 31 will be pending in the present patent application. Claims 1 to 29, and 32 to 37 have been canceled, without prejudice. In particular, claims 1 to 29 and 32 to 37 were previously withdrawn as being directed to non-elected subject matter and have now been canceled in view of the finality of the restriction requirement as indicated at page 2 of the Action. Applicants reserve the right to present claims 1 to 29 and 32 to 37 in a later-filed divisional patent application.

A Request for Continued Examination ("RCE") pursuant to 37 C.F.R. § 1.114 accompanies this paper. Applicants, therefore, request entry of the RCE to re-open prosecution of the present patent application.

An Information Disclosure Statement is also filed herewith.

The Action includes a rejection under 35 U.S.C. § 103(a). In view of the following remarks, reconsideration and withdrawal of the rejection are requested respectfully.

Discussion of the Rejection Under 35 U.S.C. § 103(a)

Claims 30 and 31 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over published U.S. patent application 2002/0142585 ("Mandal") in view of the article C. Waldfried, et al., "Single Wafer RapidCuring™ of Porous Low-k Materials", IEEE (2002), pp. 226-228 ("Waldfried"). Applicants respectfully traverse this rejection as the Action fails to provide any reason why a person of ordinary skill in the art having Mandal and Waldfried before him would have been motivated to modify their teachings in such a way as to obtain any compound or practice any method recited in Applicants' claimed invention.

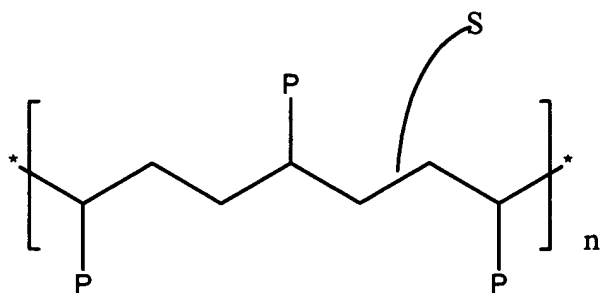
To establish a *prima facie* case of obviousness, it is fundamental that the prior art must teach or suggest all the claim limitations. MPEP § 2143; *In re Evanega*, 4 USPQ.2d 1249 (Fed Cir. 1987). The combination of Mandal and Waldfried is ***incapable*** of rendering

Applicants' claims obvious because such combination does not teach or suggest "a **mixture** for depositing an organosilicate film comprising ... at least one structure-former precursor ... and a pore-former precursor" as is required by Applicants' claimed invention (*see, e.g.*, claim 30).

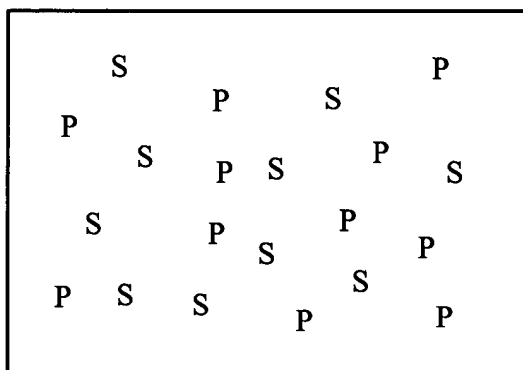
The Action mistakenly asserts that "Mandal discloses a **mixture** for depositing an organosilicate film comprising a dielectric constant of 3.5 or below, the mixture comprising at least one structure-former precursor selected from the group consisting of an organosilane and an organosiloxane (p. 3 para. 29, 32-33) and a pore-former precursor (p.4 para. 36)" (Action at 2-3) (emphasis added). A closer look at Mandal, however, reveals that Mandal does not teach a **mixture** of the two recited components; rather, Mandal teaches a **single molecule** having (1) a structure-forming function and (2) a pore-forming function. In this regard, Mandal teaches that the molecule has a structure-forming "backbone" having thermally labile groups that are "pendant" thereto:

The silicon/oxygen material is deposited by plasma enhanced chemical vapor deposition of one or more **compounds comprising at least one oxidizable silicon containing component and at least one non-silicon containing component having thermally labile groups**. Preferably, the silicon/oxygen material is deposited by plasma enhanced chemical vapor deposition of a siloxane comprising two or more silicons and four or more methyl groups bonded to the silicon atoms and at least one oxidizable chemical comprising a thermally labile member selected from the group consisting of tertiarybutyl, tertiarybutoxy, furfuryl, furfuryloxy, and neopentyl. The labile groups decompose to gaseous products and leave voids when the deposited silicon/oxygen containing material is annealed

(Mandal at page 2, paragraph [0012]) (emphasis added). By way of illustration, Mandal teaches a **single molecule** having both a structure-forming component and a pore-forming component:



, wherein "P" is the pore-forming component and "S" is the structure-forming component. In Mandal, the pore-forming component is a group that is pendant from the backbone, *i.e.*, the structure-forming component. In contrast, Applicants' claimed invention defines a **mixture** of "S" and "P" as defined above,



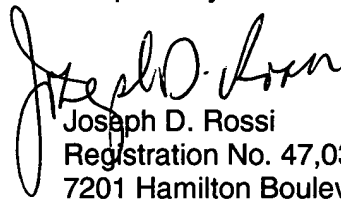
. Thus, Mandal – either alone or in combination with Waldfried – cannot render Applicants' claimed invention obvious because Mandal does **not** disclose or suggest the claimed **mixture**. Accordingly, reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a) are requested respectfully.

Conclusion

Applicants believe that the foregoing constitutes a complete and full response to the Action of record. Applicants respectfully submit that this application is now in condition for allowance. Accordingly, an indication of allowability and an early Notice of Allowance are respectfully requested.

The Commissioner is hereby authorized to charge the fee required and any additional fees that may be needed to Deposit Account No. 01-0493 in the name of Air Products and Chemicals, Inc.

Respectfully submitted,


Joseph D. Rossi
Registration No. 47,038
7201 Hamilton Boulevard
Allentown, PA 18195-1501
(610) 481-8169